Release notes for ENDF/B Development e-051_Sb_000 evaluation

October 13, 2016

- `fudge-4.0` Warnings:

  1. Mislabled emitted particle
     Reading ENDF file: ../e-051 Sb 000.endf (Error # 0): ZAP messed up

     `WARNING: photon most likely labelled as an electron (ZAP = 11), converting to ZAP = 0`

  2. FIXME: Generic fudge unimplemented message
     reaction label 1: e- + Sb + gamma [bremsstrahlung] / Product: e- (Error # 0): Generic unimp (c)

     `WARNING: Checking not yet implemented for energyLoss type data`

  3. FIXME: Generic fudge unimplemented message
     reaction label 2: e- + Sb [excitation] / Product: e- (Error # 0): Generic unimp (c)

     `WARNING: Checking not yet implemented for energyLoss type data`

- `fudge-4.0` Errors:

  1. Calculated and tabulated thresholds don't agree
     reaction label 0: e- + Sb [large angle Coulomb scattering] / Cross section: (Error # 0): Threshold mismatch

     `WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 10. eV!`

  2. Calculated and tabulated thresholds don't agree
     reaction label 1: e- + Sb + gamma [bremsstrahlung] / Cross section: (Error # 0): Threshold mismatch

     `WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 10. eV!`

  3. Calculated and tabulated thresholds don't agree
     reaction label 2: e- + Sb [excitation] / Cross section: (Error # 0): Threshold mismatch

     `WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 10. eV!`

  4. Calculated and tabulated thresholds don't agree
     reaction label 3: e- + e- + Sb1s1/2 / Cross section: (Error # 0): Threshold mismatch

     `WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 30479. eV!`

  5. Calculated and tabulated thresholds don't agree
     reaction label 4: e- + e- + Sb2s1/2 / Cross section: (Error # 0): Threshold mismatch

     `WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 4673.7 eV!`

  6. Calculated and tabulated thresholds don't agree
     reaction label 5: e- + e- + Sb2p1/2 / Cross section: (Error # 0): Threshold mismatch

     `WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 4386. eV!`

  7. Calculated and tabulated thresholds don't agree
     reaction label 6: e- + e- + Sb2p3/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 4130.5 eV!
```

8. Calculated and tabulated thresholds don't agree
   reaction label 7: e- + e- + Sb3s1/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 928.98 eV!
```

9. Calculated and tabulated thresholds don't agree
   reaction label 8: e- + e- + Sb3p1/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 809.16 eV!
```

10. Calculated and tabulated thresholds don't agree
    reaction label 9: e- + e- + Sb3p3/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 761.6900000000001 eV!
```

11. Calculated and tabulated thresholds don't agree
    reaction label 10: e- + e- + Sb3d3/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 547.79 eV!
```

12. Calculated and tabulated thresholds don't agree
    reaction label 11: e- + e- + Sb3d5/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 537.85 eV!
```

13. Calculated and tabulated thresholds don't agree
    reaction label 12: e- + e- + Sb4s1/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 158.27 eV!
```

14. Calculated and tabulated thresholds don't agree
    reaction label 13: e- + e- + Sb4p1/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 117.02 eV!
```

15. Calculated and tabulated thresholds don't agree
    reaction label 14: e- + e- + Sb4p3/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 108.12 eV!
```

16. Calculated and tabulated thresholds don't agree
    reaction label 15: e- + e- + Sb4d3/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 41.87 eV!
```

17. Calculated and tabulated thresholds don't agree
    reaction label 16: e- + e- + Sb4d5/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 40.56 eV!
```

18. Calculated and tabulated thresholds don't agree
    reaction label 17: e- + e- + Sb5s1/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 15.92 eV!
```

19. Calculated and tabulated thresholds don't agree
reaction label 18: e- + e- + Sb5p1/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 7.73 eV!
```

20. Calculated and tabulated thresholds don't agree
reaction label 19: e- + e- + Sb5p3/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 7.02 eV!
```

- `xsectplotter` Warnings:

  1. Mislabled emitted particle
     Error: ZAP messed up

     ```
     stderr while processing crossSection

             WARNING: photon most likely labelled as an electron (ZAP = 11), converting to ZAP = 0
     ... [2 more lines]
     ```